

## REVIEWS

"*Field Guide to the Ferns and Other Pteridophytes of Georgia*," by L. H. Snyder, Jr., and J. G. Bruce. 1986. 270 pp. Athens: University of Georgia Press. ISBN 0-8203-0838-2 (cloth, \$25.00), ISBN 0-8203-0847-1 (paperback, \$12.50).

This is an up-to-date flora of the ferns and fern allies of Georgia, patterned after its forerunner, the 1951 *Ferns of Georgia*, by McVaugh and Pyron. Much new has been added to the knowledge of Georgia ferns, and there could probably still be a few more county dots added, but this looks like 1986 state-of-the-art. Each taxon is illustrated with a full page line drawing, often with detailed insets; many are from the McVaugh and Pyron illustrations, some are new. The illustrations are representative and adequate for identification in most cases, especially with the ferns. Each taxon also has the usual description, range, and habitat, and a county dot map on the facing page for easy reference. An introductory section outlines fern morphology, physiographic regions of the state, and how to use the book. There is a combination morphology-habitat outline to genera. This substitutes for the conventional dichotomous key, which is omitted. I don't think this will be helpful, but beginners will find their way by making good use of the illustrations, and advanced fern enthusiasts probably bypass most generic keys anyway.

This is a careful treatment. Mr. Snyder, retired and not a trained biologist, thought a few years ago that it would be fun to learn a fern or two. I think he has graduated from hobbyist to semipro. Dr. Bruce knows the subject academically and thoroughly. They have made a good team. There are the usual nit-pickings which one can inevitably make with a flora full of records and descriptions. I doubt that the descriptions or illustrations are adequate for *Asplenium resiliens*, *A. heteroresiliens*, and *A. heterochroum*. They are close and subtle; one may also have to resort to number of spores per sporangium—32 in *A. resiliens* and *A. heteroresiliens* and 64 in *A. heterochroum*. *Pilularia* is also known from Tennessee. In *Asplenium* and *Cystopteris* the polyploid species are referred to as "fertile hybrids" of named parents, which is an oversimplification, and confusing when "sterile hybrids" are also listed. These "fertile hybrids" would be better considered as "fertile species of hybrid origin," or as "allopolyploid species derived from named parents" as was done for *Dryopteris celsa*. Lastly, there is no discussion of the arrangement of genera. They are placed in a more or less phylogenetic sequence, except for the insertion of *Polypodium* "up front" between *Osmunda* (Osmundaceae) and *Lygodium* (Schizaeaceae), and the blechnoid ferns with elongate sori with *Asplenium* and *Athyrium*; these are placed descriptively with genera having similar sori.

One of the high points of the book is the treatment of the bog clubmosses, a special research interest of Dr. Bruce and an especially confusing group on the Georgia Coastal Plain. The line drawings help but the photographic plates are all one could ask to help unravel the three species and three hybrids of the *Lycopodium alopecuroides*—*apressum*—*prostatum* complex.

Those interested in the pteridophytes of this part of the world will be glad to



see how much has changed since 1951.—A. M. EVANS, Botany Department, University of Tennessee, Knoxville, TN 37996.

"*Ferns and allied plants of Victoria, Tasmania and South Australia*," by Betty D. Duncan and Golda Issac. 1986. 258 pp. Melbourne Univ. Press. ISBN 0-522-84262-3. Available hardcover only, exclusive U.S. distributor: International Specialized Book Services, Inc., 5602 N.E. Hassalo Street, Portland, Oregon 97213-3640. \$20.00 + \$2.25 postage.

This book is a field guide for naturalists, gardeners, and professional botanists. The introductory chapter makes the book understandable to the layman since it covers the fern life cycle, morphology, taxonomy, and how the dot distribution maps were prepared. In the following taxonomic chapters, the Polypodiaceae *sensu latissimo* is divided into twelve families, and genera are treated within the families. The genera are often narrowly defined, e.g., *Christella* and *Pneumatopteris* are separated from *Thelypteris*; *Polyphlebium*, *Macroglena*, and *Apteropteris* are separated from *Hymenophyllum* and *Trichomanes*. There are no keys to the families, but the book has two keys to the genera: 1) an illustrated, dichotomous key, and 2) a foldout tabular key that resembles a sideways dendrogram. The species treatments describe 130 pteridophytes in 53 genera. Synonyms are not listed unless widely used or controversial, as in Holttum's vs. Tryon's classification of tree ferns. The species descriptions are brief, followed by a list of the most important field characters. The discussions deal with habitats, variation, and other features of the plants, and here the authors show that they have considerable field experience as evidenced by their original observations about the ecology of ferns in the region. Each species treatment ends with notes on cultivation and a statement of world range. Following the taxonomic chapters is a nine page, illustrated chapter on growing ferns (by C. J. Goudey and R. J. Hill). The authors emphasize growing ferns from spores, special requirements of epiphytic or rupestral ferns, and problems with insects and other pests. A comprehensive bibliography, glossary of terms, and index to names conclude the book.

The book's greatest strength is its superb illustrations. Almost all the species have black and white photographs showing sori, leaf cutting, and, in many cases, habit and habitat. In addition, eight color plates, each with six pictures, are interspersed throughout the text. All the photographs are sharp, detailed, and well reproduced. I congratulate Bruce Fuhrer, the photographer, for his fine work. In addition to the photographs, line drawings are given and often show details of scales, hairs, or other features difficult to capture on film. The dust jacket is an attractive watercolor showing ten species of the region.

The book has, however, two weaknesses. First, although it covers Victoria, Tasmania, and South Australia, dot distribution maps are given only for Victoria. Second, cytological information is lacking—lamentable because such information is important in fern classification. Nevertheless, the book is well written, beautifully illustrated, and reasonably priced. I recommend it to everyone from down